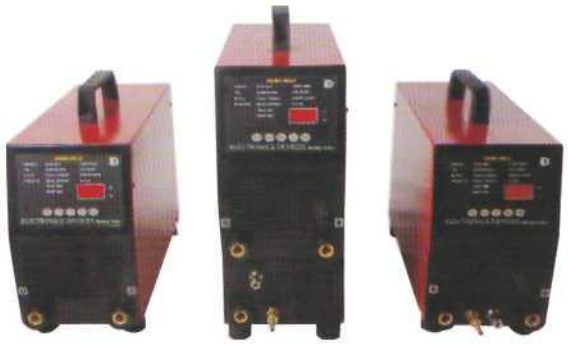
Sigma **Weld** SW170

Specifications/ Models	SW 170 MT	SW 170 HF	SW 170 PT	SW 170 UD Without HF	SW 170 PW Without HF
Rated Input Voltage	1- phase 230 ± 15 % 50 / 60 Hz	1- phase 230 ± 15 % 50 / 60 Hz	1- phase 230 ± 15 % 50 / 60 Hz	1- phase 230 ± 15 % 50 / 60 Hz	1- phase 230 ± 15 % 50 / 60 Hz
Rated Power (KVA) at 100%	5.1 KVA	5.1 KVA	5.1 KVA	5.1 KVA	5.1 KVA
Rated Current Duty Cycle	70% @ 170 A 100% @ 130 A	70% @ 170 A 100% @ 130 A	70% @ 170 A 100% @ 130 A	70% @ 170 A 100% @ 130 A	70% @ 170 A 100% @ 130 A
OCV - DC	80 V (nominal) 20 V (energy saving mode)	80 V (nominal) 20 V (energy saving mode)	80 V (nominal) 20 V (energy saving mode)	80 V (nominal) 20 V (energy saving mode)	80 V (nominal) 20 V (energy saving mode)
Energy Save	In Built	In Built	In Built	In Built	In Built
Protection:					
1) Thermal Shutdown	Yes	Yes	Yes	Yes	Yes
2) Under Voltage	Yes	Yes	Yes	Yes	Yes
3) Over Current	Yes	Yes	Yes	Yes	Yes
4) IGBT Peak Current	Yes	Yes	Yes	Yes	Yes
Cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
Output Current Range	5 - 170 A	5 - 170 A	5 - 170 A	5 - 170 A	5 - 170 A
Ignition Type	Lift - Arc (Contact)	HF / Lift - Arc (Non - Contact)	HF / Lift - Arc (Non - Contact)	Lift - Arc (Contact)	Lift - Arc (Contact)
Arc Force	Auto adjusted	Auto adjusted	Auto adjusted	Auto adjusted	Auto adjusted
Hot Start Current	30%	30%	30%	30%	30%
Hot Start Duration (Approx)	300 m Sec.	300 m Sec.	300 m Sec.	300 m Sec.	300 m Sec.
Arc Breaking Control	In built	In built	In built	In built	In built
Peak Current	170 A	170 A	170 A	170 A	170 A
High Frequency :					
1) Up Slope Time	-	0.1 - 10.0 Sec	0.1 - 10.0 Sec	0.1 - 10.0 Sec	0.1 - 10.0 Sec
2) Down Slope Time	-	0.1 - 10.0 Sec	0.1 - 10.0 Sec	0.1 - 10.0 Sec	0.1 - 10.0 Sec
Dc Pulse TIG :					
1) Base Current	-	-	5A - 100% of peak current	-	5A - 100% of peak current
2) Peak Time	-	-	0.1 - 10.0 Sec	-	0.1 - 10.0 Sec
3) Base Time	-	-	0.1 - 10.0 Sec	-	0.1 - 10.0 Sec
Gas Pre - Flow	-	In built	In built	In built	In built
Gas Post - Flow	-	1.0 Sec/20 A	1.0 Sec/20 A	1.0 Sec/20 A	1.0 Sec/20 A
D x W x H	400mm X 190mm X 280mm	400mm X 190mm X 390mm	400mm X 190mm X 390mm	400mm X 190mm X 280mm	400mm X 190mm X 280mm
Weight	12 Kgs	15 Kgs	15 Kgs	12 Kgs	12 Kgs
Digital Ammeter	In built	In built	In built	In built	In built
Process Memory Recall	In built	In built	In built	In built	In built
Gas Solenoid Valve	Optional	In built	In built	In built	In built

Continual development can lead to change in specification

SigmaWeld™
Digital Welding Inverters for MMA, TIG, MIG

Sigma Weld - SW170 Digital Welding Inverters



SW170MT SW170HF, SW170PT SW170UD, SW170PW

Sigma Weld series welding machines are sophisticated IGBT based inverters with total digital control having wide current range. Sigma Weld is designed to meet varied requirement of the welding industry covering Manual Arc Welding, TIG Welding, High Frequency TIG Welding, Pulse TIG Welding. Advanced micro controller technology enables Sigma Weld to have UpSlope / DownSlope and Pulsing even without the use of High Frequency.

PORTABLE: It is very portable at 12 Kgs. (basic inverter) operator can move from one place to another place without any difficulty.

LOWOCV: During energy saving, OCV goes down to as low as 20 VDC for added safety and energy saving.

ADAPTIVE HOT START: Sigma Weld prevents electrode from sticking and gives clean start each time.

SINGLE AMPERAGE RANGE: Digital front panel allows the operator to set the current is required in single increment also.

TIG IGNITION - LIFT-ARC: Sigma Weld provides TIG arc starting and there is no need to use of high frequency.

IN BUILT GAS SOLENOID VALVE: Operator can use very light TIG torch and use gas only as required, ensuring zero wastage of gas.

THERMAL OVERLOAD PROTECTION: Reliable thermal shutdown mechanism in place, in case of overuse or blockage in airflow.

POWER FLUCTUATION COMPENSATION: Power source does not get affected and it remains constant regardless of fluctuation in input power ± 15% It is suitable especially for the Indian Industry.

DIGITAL AMPERE READING: During welding, it continuously monitors and displays weld current.

ROBUST: Sigma Weld can work with cable length of upto 50 m with reduced duty cycle.

VERSATILE: Sigma Weld can weld using all types of welding electrodesfsuitable for 6010, 6013, 7018 and equivalent electrodes).

PROCESS MEMORY RECALL: It remembers separately the settings for each and every process. This leads to fast set up time between process changes and each Power ON.

ENERGY SAVING MODE: When operator is not welding for 2 minutes, then welding inverter in Manual / Stick mode goes into energy save mode, enabling saving of unwanted energy loss.

AVAILABLE WELDING MODES

- Lift-ArcTIG (GTAW)
- Lift-Arc/Up Slope/Down Slope
- High Frequency/ Up Slope/Down Slope
- High Frequency/Up Slope/Down Slope/Pulsing

MODELS AVAILABLE

MT: Manual/TIG inverter. SW 170MT includes the basic features, which are necessary for DC TIG or Stick welding applications.

UD: Manual/TIG inverter. The SW170UD without HF starts with settable up slope and down slope timings.Most suitable where high frequency is not permissible to use still can achieve the same control using only Lift Arc technology.

PW: Manual/TIG inverter. The SW170PW without HF starts with settable up slope and down slope timings along with Pulsing Control for Peak and Base Current, most suitable where high frequency is not permissible to use still can achieve the same control using only Lift Arc technology.

HF: Manual/TIG inverter with high frequency. The SW170HF provides HF starts with settable up slope and down slope timings where greater control is required.

PT: Manual/TIG inverter with high frequency pulsing control. The SW170PT providesHF starts with settable up slope and downslope timings along with Pulsing Control for Peak and Base Current where greater control is required.

ORDERING INFORMATION

SW 170 Mode

SW :SigmaWeld

170 : 170A

Mode :MTUD, PW, HFPT

Electronics Devices
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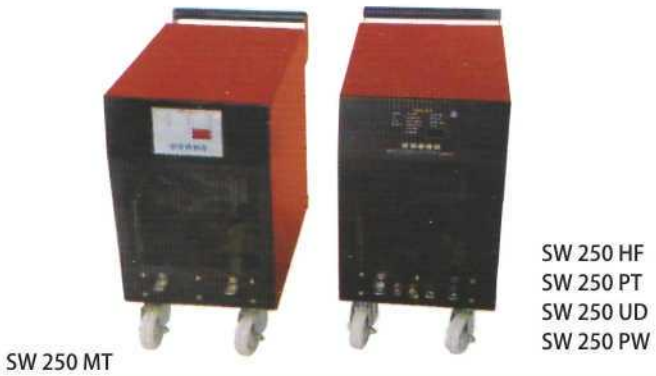
SigmaWeld™
Digital Welding Inverters for MMA, TIG, MIG

Sigma Weld - SW250 Digital Welding Inverters



SW 250 MT

SW 250 HF
SW 250 PT
SW 250 UD
SW 250 PW

Sigma Weld series welding machines are sophisticated IGBT based inverters with total digital control having wide current range. Sigma Weld is designed to meet varied requirement of the welding industry covering Manual Arc Welding, TIG Welding, High Frequency TIG Welding, Pulse TIG Welding. Advanced micro controller technology enables Sigma Weld to have Up Slope / DownSlope and Pulsing even without the use of High Frequency.

Mobility: This 30 Kg. inverter has 4 wheels, so that the operator can move from one place to another place without any difficulty.

Low OCV: During energy saving, OCV goes down, to as low as 20 VDCfor added safety and energy saving.

Adaptive Hot Start : Sigma Weld prevents electrode from sticking and gives clean start each time.

Single **Amperage Range** : Digital front panel allows the operator to set the current is required in single increment also.

TIG Ignition - Lift-Arc : Sigma Weld provides TIG arc starting and there is no need to use of high frequency.

In Built Gas Solenoid Valve: Operator can use very light TIG torch and use gas only as required, ensuring zero wastage of gas.

Thermal overload protection: Reliable thermal shutdown mechanism in place, in case of overuse or blockage in airflow.

Power Fluctuation Compensation: Power source does not get affected and it remains constant regardless of fluctuation in input power ± 15% It is suitable especially for the Indian Industry.

Digital Ampere Reading: During welding, it continuously monitors and displays weld current.

Robust : Sigma Weld can work with cable length of upto 50 m with reduced duty cycle.

Versatile : Sigma Weld can weld using all types of welding electrodes (suitable for 6010, 6013, 7018 and equivalent electrodes).

Process Memory Recall: It remembers separately the settings for each and every process This leads to fast set up time between process changes and each Power ON.

Energy Saving Mode: When operator is not welding for 2 minutes, then welding inverter in Manual / Stick mode goes into energy save mode, enabling saving of unwanted energy loss.

AVAILABLE WELDING MODE

- Stick (MMA)
- Lift-ArcTIG fGTAW)
- Lift-Arc/Up Slope/Down Slope
- Lift-Arc/Up Slope/Down Slope/Pulsing
- High Frequency/Up Slope/Down Slope
- High Frequency/Up Slope/Down Slope/Pulsing

MODELS AVAILABLE

MT: Manual/TIG inverter. SW25OMT includes the basic features, which are necessary for DCTIG or Stick welding applications.

UD: Manual/TIG inverter. The SW25OUD without HF starts with settable up slope and down slope timings. Most suitable where high frequency is not permissible to use still can achieve the same control using only Lift Arc technology.

PW: Manual/TIG inverter. The SW25OPW without HF starts with settable up slope and down slope timings along with Pulsing Control for Peak and Base Current, most suitable where high frequency is not permissible to use still can achieve the same control using only Lift Arc technology.

HF: Manual/TIG inverter with high frequency. The SW250HF provides HF starts with settable up slope and down slope timings where greater control is required.

PT: Manual/TIG inverter with high frequency pulsing control. The SW25OPT provides HF starts with settable up slope and down slope timings along with Pulsing Control for peak and Base Currentwhere greater control is required.

ORDERING INFORMATION

SW 250 Mode
SW : Sigma Weld
250 : 250A
Mode : MT,UD,PW, **HF,PT**

Electronics Devices
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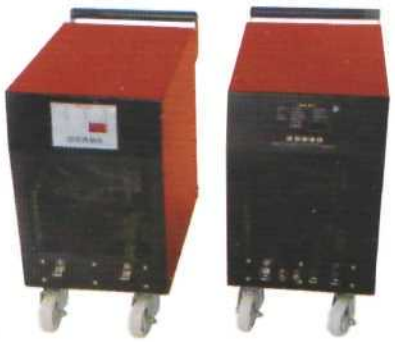
Sigma **Weld** SW400

Specifications/ Models	SW 400 MT	SW 400 HF	SW 400 PT	SW 400 UD Without HF	SW 400 PW Without HF
Rated Input Voltage	3- phase 230 ± 15 % 50 / 60 Hz	3- phase 230 ± 15 % 50 / 60 Hz	3- phase 230 ± 15 % 50 / 60 Hz	3- phase 230 ± 15 % 50 / 60 Hz	3- phase 230 ± 15 % 50 / 60 Hz
Rated Power (KVA) at 100%	13 KVA	13 KVA	13 KVA	13 KVA	13KVA
Rated Current Duty Cycle	60% @ 400 A 100% @ 260 A	60% @ 400 A 100% @ 260 A	60% @ 400 A 100% @ 260 A	60% @ 400 A 100% @ 260 A	60% @ 400 A 100% @ 260 A
OCV - DC	80 V (nominal) 20 V (energy saving mode)	80 V (nominal) 20 V (energy saving mode)	80 V (nominal) 20 V (energy saving mode)	80 V (nominal) 20 V (energy saving mode)	80 V (nominal) 20 V (energy saving mode)
Energy Save	In Built	In Built	In Built	In Built	In Built
Protection:					
1) Thermal Shutdown	Yes	Yes	Yes	Yes	Yes
2) Under Voltage	Yes	Yes	Yes	Yes	Yes
3) Over Current	Yes	Yes	Yes	Yes	Yes
4) IGBT Peak Current	Yes	Yes	Yes	Yes	Yes
Cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
Output Current Range	5 - 400 A	5 - 400 A	5 - 400 A	5 - 400 A	5 - 400 A
Ignition Type	Lift - Arc (Contact)	HF / Lift - Arc (Non - Contact)	HF / Lift - Arc (Non - Contact)	Lift - Arc (Contact)	Lift - Arc (Contact)
Arc Force	Auto adjusted	Auto adjusted	Auto adjusted	Auto adjusted	Auto adjusted
Hot Start Current	30%	30%	30%	30%	30%
Hot Start Duration (Approx)	300 m Sec.	300 m Sec.	300 m Sec.	300 m Sec.	300 m Sec.
Arc Breaking Control	In built	In built	In built	In built	In built
Peak Current	400 A	400 A	400 A	400 A	400 A
High Frequency :					
1) Up Slope Time	-	0.1 - 10.0 Sec	0.1 - 10.0 Sec	0.1 - 10.0 Sec	0.1 - 10.0 Sec
2) Down Slope Time	-	0.1 - 10.0 Sec	0.1 - 10.0 Sec	0.1 - 10.0 Sec	0.1 - 10.0 Sec
Dc Pulse TIG :	-				
1) Base Current	-	-	5A - 100% of peak current	-	5A - 100% of peak current
2) Peak Time	-	-	0.1 - 10.0 Sec	-	0.1 - 10.0 Sec
3) Base Time	-	-	0.1 - 10.0 Sec	-	0.1 - 10.0 Sec
	-	In built	In built	In built	In built
Gas Post - Flow	-	1.0 Sec/20 A	1.0 Sec/20 A	1.0 Sec/20 A	1.0 Sec/20 A
D x W x H	600mm X 360mm X 640mm	600mm X 360mm X 640mm	600mm X 360mm X 640mm	600mm X 360mm X 640mm	600mm X 360mm X 640mm
Digital Ammeter	In built	In built	In built	In built	In built
Process Memory Recall	In built	In built	In built	In built	In built
Gas Solenoid Valve	Optional	In built	In built	In built	In built
Water cooling for TIG torch	Optional	Optional	Optional	Optional	Optional

Continual development can lead to change in specification

SigmaWeld™
Digital Welding Inverters for MMA, TIG, MIG

Sigma Weld - SW400 Digital Welding Inverters



SW 400 MT

SW 400 HF
SW 400 PT
SW 400 UD
SW 400 PW

Sigma Weld series welding machines are sophisticated IGBT based inverters with total digital control having wide current range. Sigma Weld is designed to meet varied requirement of the welding industry covering Manual Arc Welding, TIG Welding, High Frequency TIG Welding, Pulse TIG Welding. Advanced micro controller technology enables Sigma Weld to have Up Slope / DownSlope and Pulsing even without the use of High Frequency.

Mobility: This 50 Kgs. inverter has 4 wheels so that the operator can move it easily from one location toanother.

Low OCV: During energy saving, OCV goes down to as low as 20 VDC for added safety and energy saving.

Adaptive Hot Start: Sigma Weld prevents electrode from sticking and gives clean start each time.

Single Amperage **Range:** Digital front panel allows the operator to set the current is required in single increment also.

TIG Ignition • Lift-Arc: Sigma Weld provides TIG arc starting and there is no need to use of high frequency.

In Built Gas Solenoid Valve: Operator can use very light TIG torch and use gas only as required, ensuring zero wastage of gas.

Thermal overload protection: Reliable thermal shutdown mechanism in place, in case of overuse or blockage in airflow.

Power Fluctuation Compensation: Power source does not get affected and it remains constant regardless of fluctuation in input power ± 10 %. Its suitable especially for the Indian Industry.

Digital Ampere Reading: During welding, it continuously monitors and displays weld current.

Robust: Sigma Weld can work with cable length of upto 50 m with reduced duty cycle.

Versatile: Sigma Weld can weld using all types of welding electrodes (suitable for 6010, 6013, 7018 and equivalent electrodes).

Process Memory Recall: It remembers separately the settings for each and every process. This leads to fast set up time between process changes and each Power ON.

Energy Saving Mode: When operator is not welding for 2 minutes, then welding inverter in Manual / Stick mode goes into energy save mode, enabling saving of unwanted energy loss.

AVAILABLE WELDING MODE

- Stick (MMA)
- Lift-ArcTIG (GTAW)
- Lift-Arc/Up Slope/Down Slope
- Lift-Arc/Up Slope/Down Slope/Pulsing
- High Frequency/ Up Slope/Down Slope
- High Frequency/Up Slope/Down Slope/Pulsing

MODELS AVAILABLE

MT: Manual /TIG inverter. SW400MT includes the basic features. which are necessary for DCTIG or Stick welding applications.

UD: Manual/TIG inverter. The SW400UD without HF starts with sellable up slope and down slope timings. Most suitable where high frequency is not permissible to use still can achieve the same control using only Lift Arc technology.

PW: Manual/TIG inverter. The SW400PW without HF starts with sellable up slope and down slope timings along with Pulsing control for peak and base current, most suitable where high frequency is not permissible to use still can achieve the same control using only Lift Arc technology.

HF: Manual/TIG inverter with high frequency. The SW400HF provides HF starts with settable up slope and down slope timings where greater control is required.

PT: Manual/TIG inverter with high frequency pulsing control. The SW400PT provides HF starts with settable up slope and down slope timings along with Pulsing Control for Peak and Base Current where greater control is required.

ORDERING INFORMATION

SW 400 Mode
SW : SigmaWeld
400 : 400A
Mode: MT,UD,PW,HF,PT,

Electronics Devices

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email. 5igmaweld@electronicsdevices.com • www.electronic5devices.com

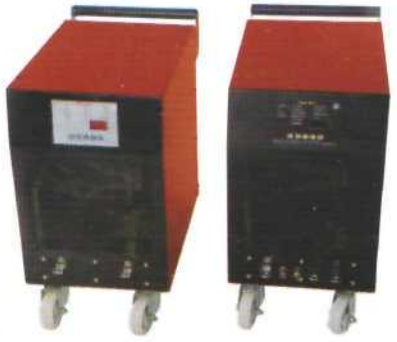
Sigma **Weld** SW600

Specifications/ Models	SW 600 MT	SW 600 HF	SW 600 PT	SW 600 UD Without HF	SW 600 PW Without HF
Rated Input Voltage	3- phase 415+10% 50 / 60 Hz	3- phase 415+10% 50 / 60 Hz	3- phase 415+10% 50 / 60 Hz	3- phase 415+10% 50 / 60 Hz	3- phase 415+10% 50 / 60 Hz
Rated Power (KVA) at 100%	32 KVA	22 KVA	22 KVA	22 KVA	22KVA
Rated Current Duty Cycle	40% @ 600 A 100% @ 380 A	40% @ 600 A 100% @ 350 A	40% @ 600 A 100% @ 350 A	40% @ 600 A 100% @ 350 A	40% @ 600 A 100% @ 350 A
OCV - DC	85 V (nominal) 20 V (energy saving mode)	80 V (nominal) 20 V (energy saving mode)	80 V (nominal) 20 V (energy saving mode)	80 V (nominal) 20 V (energy saving mode)	80 V (nominal) 20 V (energy saving mode)
Energy Save	In Built	In Built	In Built	In Built	In Built
Protection:					
1) Thermal Shutdown	Yes	Yes	Yes	Yes	Yes
2) Under Voltage	Yes	Yes	Yes	Yes	Yes
3) Over Current	Yes	Yes	Yes	Yes	Yes
4) IGBT Peak Current	Yes	Yes	Yes	Yes	Yes
Cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
Output Current Range	40 -600 A	8 -600 A	8 -600 A	8 -600 A	8 -600 A
Ignition Type	Lift - Arc (Contact)	HF / Lift - Arc (Non - Contact)	HF / Lift - Arc (Non - Contact)	Lift - Arc (Contact)	Lift - Arc (Contact)
Arc Force	Auto adjusted	Auto adjusted	Auto adjusted	Auto adjusted	Auto adjusted
Hot Start Current	30%	30%	30%	30%	30%
Hot Start Duration (Approx)	300 m Sec.	300 m Sec.	300 m Sec.	300 m Sec.	300 m Sec.
Arc Breaking Control	In built	In built	In built	In built	In built
Peak Current	600 A	600 A	600 A	600 A	600 A
High Frequency :					
1) Up Slope Time	-	0.1 - 10.0 Sec	0.1 - 10.0 Sec	0.1 - 10.0 Sec	0.1 - 10.0 Sec
2) Down Slope Time	-	0.1 - 10.0 Sec	0.1 - 10.0 Sec	0.1 - 10.0 Sec	0.1 - 10.0 Sec
Dc Pulse TIG :					
1) Base Current	-		8A - 100% of peak current		8A - 100% of peak current
2) Peak Time	-		0.1 - 10.0 Sec		0.1 - 10.0 Sec
3) Base Time	-		0.1 - 10.0 Sec		0.1 - 10.0 Sec
Gas Pre - Flow	-	In built	In built	In built	In built
Gas Post Flow	-	1.0 Sec/20 A	1.0 Sec/20 A	1.0 Sec/20 A	1.0 Sec/20 A
D x W x H	600mm X 400mm X 650mm	600mm X 400mm X 650mm	600mm X 360mm X 650mm	600mm X 400mm X 650mm	600mm X 400mm X 650mm
Digital Ammeter	In built	In built	In built	In built	In built
Process Memory Recall	In built	In built	In built	In built	In built
Gas Solenoid Valve	Optional	In built	In built	In built	In built
Water cooling for TIG torch	Optional	Optional	Optional	Optional	Optional

Continual development can lead to change in specification

SigmaWeld™
Digital Welding Inverters for MMA, TIG, MIG

Sigma Weld - SW600 Digital Welding Inverters



SW 600 MT

SW 600 HF
SW 600 PT
SW 600 UD
SW 600 PW

Sigma Weld series welding machines are sophisticated IGBT based inverters with total digital control having wide current range. Sigma Weld is designed to meet varied requirement of the welding industry covering Manual Arc Welding, TIG Welding, High Frequency / TIG Welding, Pulse TIG Welding. Advanced micro controller technology enables Sigma Weld to have Up Slope / DownSlope and Pulsing even without the use of High Frequency.

Mobility: This 55 Kgs. inverter has 4 wheels so that the operator can move it easily from one location to another.

Low OCV: During energy saving, OCV goes down to as low as 20 VDC for added safety and energy saving.

Adaptive Hot Start: Sigma Weld prevents electrode from sticking and gives clean start each time.

Single Amperage Range: Digital front panel allows the operator to set the current is required in single increment also.

TIG Ignition - Lift-Arc: Sigma Weld provides TIG arc starting and there is no need to use of high frequency.

In Built Gas Solenoid Valve: Operator can use very light TIG torch and use gas only as required, ensuring zero wastage of gas.

Thermal overload protection: Reliable thermal shutdown mechanism in place, in case of overuse or blockage in airflow.

Power Fluctuation Compensation: Power source does not get affected and it remains constant regardless of fluctuation in input power ± 15 %. Its suitable especially for the Indian Industry.

Digital Ampere Reading: During welding, it continuously monitors and displays weld current.

Robust: Sigma Weld can work with cable length of upto 50 m with reduced duty cycle.

Versatile: Sigma Weld can weld using all types of welding electrodes (suitable for 6010. 6013, 7018 and equivalent electrodes].

Process Memory Recall: It remembers separately the settings for each and every process. This leads to fast set up time between process changes and each Power ON.

Energy Saving Mode: When operator is not weld using for 2 minutes, then welding inverter in Manual / Stick mode goes into energy save mode, enabling saving of unwanted energy loss.

AVAILABLE WELDING MODE

- •Stick (MMA)
- •Lift-ArcTIG(GTAW)
- • Lift-Arc/Up Slope/Down Slope
- • Lift-Arc/Up Slope/Down Slope/Pulsing
- • High Frequency/ Up Slope/Down Slope
- • High Frequency/Up Slope/Down Slope/Pulsing

MODELS AVAILABLE

MT: Manual /TIG inverter. SW600MT includes the basic features, which are necessary for DCTIG or Stick welding applications.

UD: Manual/TIG inverter. The SW600UD without HF starts with settable up slope and down slope timings. Most suitable where high frequency is not permissible to use still can achieve the same control using only Lift Arc technology.

PW: Manual/TIG inverter. The SW600PW without HF starts with settable up slope and down slope timings along with Pulsing Control for Peak and Base Current, most suitable where high frequency is not permissible to use still can achieve the same control using only Lift Arc technology.

HF: Manual/TIG inverter with high frequency. The SW600HF provides HF starts with settable up slope and down slope timings where greater control is required.

PT: Manual/TIG inverter with high frequency pulsing control. The SW600PT provides HF starts with settable up slope and down slope timings along with Pulsing Control for Peak and Base Current where greater control is required.

ORDERING INFORMATION

SW 600 Mode
SW : SigmaWeld
600 : 600A
Mode: MT,UD, PW.HF.PT,

Electronics Devices

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email. 5igmaweld@electronicsdevices.com • www.electronic5devices.com

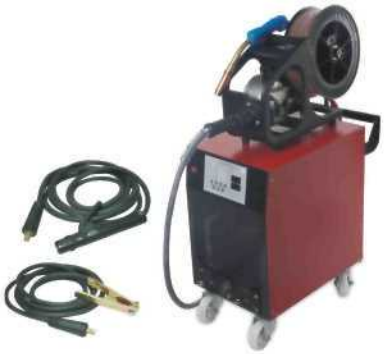
Sigma **Weld** SW ATM

Model	250ATM	400ATM	600ATM
Rated Input Voltage	3-phase 415V± 10%	3-phase 415V± 10%	3-phase 415V± 10%
	50/60 Hz	50/60 Hz	50/60 Hz
Power (KVA) @ 100%	8 KVA	13 KVA	22 KVA
Rated Duty Cycle	80% @ 250 A	60% @ 400 A	60% @ 600 A
	100% @ 200 A	100% @ 275 A	100% @ 350A
OCV-DC	65 V (nominal)	65 V (nominal)	65 V (nominal)
	20 V (energy saving mode)	20 V (energy saving mode)	20 V (energy saving mode)
D x W x H (Power Source)	620mm x 360mm x 650mm	620mm x 360mm x 650mm	620mm x 360mm x 650mm
Protection :			
1) Thermal Shutdown	YES	YES	YES
2) Under Voltage	YES	YES	YES
3) Over Current	YES	YES	YES
4) IGBT Peak Current	YES	YES	YES
5) Phase Failure	YES	YES	YES
Energy Save	In built	In built	In built
Cooling Type	Forced Air Cooled	Forced Air Cooled	Forced Air Cooled
Wire Feeder	SW250WF	SW400WF	SW400WF
Operating Voltage	24V	24V	24V
Feeding Mechanism	2 - Roll Drive	4- Roll Drive	4- Roll Drive
Filler Wires	0.8 / 1.0mm	0.8 / 1.0 / 1.2 / 1.6mm	0.8 / 1.0 / 1.2 / 1.6 / 2.4 mm
Wire Type	Solid / Flux Cored	Solid / Flux Cored	Solid / Flux Cored
Gas	Argon / CO2 / Mixed Gas	Argon / CO2 / Mixed Gas	Argon / CO2 / Mixed Gas
Gas Solonoid Valve	In built	Inbuilt	Inbuilt
D x W x H	530mm x 180mm x 330mm	530mm x 180mm x 330mm	530mm x 180mm x 330mm
Power Factor	> 0.9	>0.90	> 0.9
Efficiency Max Current	88%	88%	88%
Output Current Range			
SMAW	5 - 250A	5 - 400A	20 - 600A
GMAW	12 - 30V	12 - 36V	16 - 40V
Ignition Type	Contact	Contact	Contact
Lift Arc	Lift Arc	Lift Arc	Lift Arc
	2T / 4T	2T / 4T	2T / 4T
Weight	39 Kg	49 Kg	60 Kg
Features			
Arc Force Control	Auto Adjusted	Auto Adjusted	Auto Adjusted
Arc Breaking Control	In Built	In Built	In Built
Hot Start Current	30%	30%	30%
Hot Start Duration (approx)	300ms	300ms	300ms
Digital Voltmeter	In Built	In Built	In Built
Digital Ammeter	In Built	In Built	In Built
Process Memory Recall	In Built	In Built	In Built

Continual development can lead to change in specification

SigmaWeld™
Digital Welding Inverters for MMA, TIG, MIG

Sigma Weld - SW ATM Digital Welding Inverters



Sigma Weld series welding machines are sophisticated IGBT based inverters with total digital control having wide current range. Sigma Weld ATM is designed to meet varied requirement of the'welding industry having SMAW {Stick Manual Arc Welding), GTAW (Gas Tungsten Arc Welding) and GMAW (Gas Metal Arc Welding) all in one Power Source. Advanced micro controller technology enables Sigma Weld to have excellent soft start, digital display for both voltage and current, 2 Strokeand4Strokemodes, crater voltageand crater speed settings along with adaptive hot start for SMAW mode. Its rugged design allows operators to take longer cable lengths uptoiDDmtrs forease of operation indifficult positions.

IGBT Based Solid State Inverter Design: Latest technology used for full bridge topology to ensure reliable, superior weld control every time.

Portable; It is very portable operator can move from one place to another place without any difficulty.

Low OCV[1]: During energy saving, OCVgoes down to as lowas20VDC for added safety and energy saving.

Adaptive Soft Start. Sigma Weld ensure the wire feed speed is automatically controlled from a slow start to the set current and voltage levels to eliminate globule formation at the end of wire and gives clean start each time.

Adaptive Hot StartSigma Weld prevents electrode from sticking and gives clean start each time.

Single Increment Range. Digital front panel allows the operator to set the current and voltage is required in single increment also.

Crater Current *&* Crater VoltageProgrammable Crater Current & Crater Voltage settings for smooth weld finish.

Safe and ReliableLow OCV and protection against prolonged Output Short, IGBT Over Current, IGBT Short Circuit Current, Welding Over Current,Thermal Overload.

Power Fluctuation Compensation: Power source does not get affected and it remains constant regardless of fluctuation in input power ± 15%. It is suitable especially for the Indian Industry.

Digital Reading: During welding, it continuously monitors and displays weld current and weld voltage in all SMAW, GTAW & GMAW modes.

Versatile" 5igma Weld can weld using welding wire sizes from 0.6mm to 1.60mm. Sigma Weld can weld using all types of welding electrodes (suitable for 6010,6013,701 Band equivalent electrodes).

Process Memory Recall: It remembers separately the settings for each and *every* process. This leads to fast set up time between process changes and each Power ON.

Energy Saving Mode[1]: When operator is not welding for 2 minutes, then welding inverter in Manual / Stick mode goes into energy save mode, enabling saving of unwanted energy loss.

External Wire FeederCompact and portable external wire feeder with 4 feed roil mechanism to guarantee study uninterrupted wire feeding.

TIG Ignition - Lift-Arc. Sigma Weld providesTIG arc starting and there is no need to use of high frequency.

In Built Gas Solenoid Valve: Operator can use very light TIG torch and use gas only as required, ensuring zero wastage of gas.

Robust. Sigma Weld can work with cable length of upto 100 m

Electronics Devices

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email. 5igmaweld@electronicsdevices.com • www.electronic5devices.com

Sigma **Weld** SWMIG

Power Sources:

Sigma Weld		SW170MM 170A	SW250MM 250A	SW400MM 400A	SW500MM 500A	SW600MM 600A
Mains Voltage		230±15%	415±10%	415±10%	415±10%	415±10%
Load Capacity 40 C	60% ED	170A / 21.5V	250A / 27V	380A / 37V	500A / 42V (50%)	600A / 44V
Open Circuit Voltage		45V	52V	60V	60V	63V
External Dimensions	L X W X H	410 x 185 x 370mm	431 x 279 x 596mm	620 x 360 x 650mm	620 x 360 x 650mm	596 x 635 x 355mm

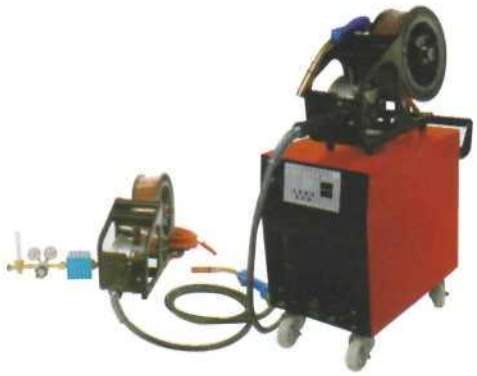
Wire Feeders:

Sigma Weld	SW170WF	SW250WF	SW400WF	SW500WF	SW600WF
Operating Voltage	24V	24V	24V	24V	24V
Feeding mechanism	2-roll drive	2 - roll drive	4-roll drive	4-roll drive	4 - roll drive
Filter Wires	0.6...0.8mm	0.8mm··· 1.2mm	0.6...1.6mm	0.8...1.6mm	0.8··· 2.4mm

Continual development can lead to change in specification

SigmaWeld™
Digital Welding Inverters for MMA, TIG, MIG

Sigma Weld - SWMIG Digital Welding Inverters



Sigma Weld series welding machines ate sophisticated IGBT based inverters with total digital control having wide current range. Sigma Weld is designed to meet varied requirement of the welding industry with MIG welding inverters for 170A, 250A, 400A,500A and 600A range. Advanced micro controller technology enables Sigma Weld to have excellent soft start, digital display for both current and voltage, adaptive adjustable inductance for both 2T and 4T operations, crater current and crater voltage features. Separate wire feed units can be mounted on the inverter or taken to work location with longer interconnection cables for added flexibility to the welder. Sigma Weld automatically controls the wire feed speed to suit the set current and voltage levels and ensures smooth welding with finer control repeatedly.

IGBT Based Solid State Inverter Design : Latest technology used for full bridge topology to ensure reliable, superior weld control every time.

Poratble: It is very portable operator can move from one place to another place without any difficulty.

Adaptive Soft Start: Sigma Weld ensure the wire feed speed is automatically controlled from a slow start to the set current and voltage levels to eliminate globuleformationattheendofwireand gives clean start each time.

Single Increment Range: Digital front panel allows the operator to set the current and voltage is required in single increment also.

Crater Current & Crater Voltage : Programmable Crater Currents Crater Voltage settings for smooth weld finish.

Safe and Reliable: Low OCV and protection against prolonged Output Short, IGBT Over Current, IGBT Short Circuit Current, Welding Over Current. Thermal Overload.

Power Fluctuation Compensation : Power source does not get affected and it remains constant regardless of fluctuation in input power ±15%. It is suitable especially forthe Indian Industry.

Digital Reading : During welding, it continuously monitors and displays weld current and weld voltage.

Selectable Post Flow: One touch button setting for3 sec. 10 sec. post flow timing.

Versatile: Sigma Weld can weld using welding wire sizes from 0.6mm to 1.60mm.

Process Memory Recall: Sigma Weld ensure faster setup time between process and on each power on by remembering the setting for each and every process individually.

Energy Saving Mode: When operator is not welding for 2 minutes, then welding inverter in Manual / Stick mode goes into energy save mode, enabling saving of unwanted energy loss.

Sett able weld stabilizer: (settable inductance) provides the flexibility to produce the optimal arc characteristics with smoother current for different types and sizes of welding wires.

External Wire Feeder: Compact and portable external wire feeder with 4 x 4 feed roll mechanism to guarantee study uninterrupted wire feeding.

ORDERING INFORMATION

SW XXXMM

SW : Sigma Weld
XXX :170A,250A,400A,500A,600A

Electronics Devices
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